An Imperative for Change: The Case for Logistics Modernization

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Logistics modernization will improve operational and tactical logistics support to the MAGTF.

Logistics modernization—for some those two words represent the greatest hope for solving the systemic logistics challenges that Marines have faced over the past decade. For others they represent the greatest current threat to maintaining the operational effectiveness of the Marine air-ground task force (MAGTF). And for the remainder, logistics modernization is simply one in a long series of confusing and incomprehensible initiatives that may or may not help the warfighter of the future. So where does ground truth lie? We spent 6 months working to answer that question. We concluded that there is a clear and compelling case to be made for implementing the new and innovative logistics processes and systems that make up logistics modernization.

What We Did and Why We Did It

LtGen Richard L. Kelly, Deputy Commandant, Installations and Logistics (DC I&L) asked us to conduct an objective, independent assessment of logistics modernization in order to determine whether the initiative was moving Marine Corps logistics in the right direction and, if so, what adjustments might be needed.

We held four executive panel sessions to help us gain a better understanding of what logistics modernization really is and what it means for the warfighter. Our intent was to ensure that we got a balanced view of this initiative from across the Marine Corps. We spent a good deal of time talking to Marines from the Operating Forces' commands. We visited Camp Lejeune and Camp Pendleton to learn how the warfighters viewed logistics modernization and what lessons learned from Operation IRAQI FREEDOM (OIF) could tell us about logistics modernization and its potential. We made a concerted effort to seek out the naysayers of logistics modernization as well as the proponents. The discussions were frank and honest. We augmented our findings from these discussions with supporting analyses from organizations like the Center for Naval Analyses and others who have examined these initiatives in some detail. Finally, we conducted an extensive series of one-on-one interviews with the senior Marine leadership and others within the Department of Defense.

What Is Logistics Modernization Really About?

Our first task was to try to understand logistics modernization and what it means for the Marine Corps. Most of what we had heard and read about logistics modernization was articulated from a logistician's perspective and used their terminology to describe it. We heard about logistics chain management, the quadrant model, business enterprise architectures, capacity management, systems realignment and categorization, and integrated logistics capability, to name a few. We experienced great frustration with our inability to get our arms around this thing called logistics modernization and even more frustration with our inability to get a clear articulation of its implications for the warfighter.

When we talked with Marines from the Operating Forces we discovered that we were not alone in our frustration. There was very little understanding and much confusion about what logistics modernization entailed and what it meant for the Marine Corps. For example, Marines frequently referred to the combat service support (CSS) migration initiative as part of logistics modernization. It isn't. They described it as being focused on gaining efficiencies at the expense of effectiveness. It isn't. We often heard it described as a garrison process reengineering and personnel realignment initiative. It isn't either of those things.

So what is logistics modernization really about? Here are three examples. The first concerns how the Marine Corps procures and manages its inventory. The Marine Corps tends to manage inventories of routine items, such as oil filters, the same way it manages critical items, such as assault amphibious vehicle sights. One aspect of logistics modernization is focused on establishing different supply chains for different types of inventory, based on the uniqueness and value of the item. High-value items deemed to be critical with few sources and low market capacity (think M1A1 tank engines) would be managed quite differently from low-value items with many sources that are used at high volumes (think office supplies). Likewise, low-value items with few or restricted sources (think military specification computers) would be managed differently from high-value items with many sources and large market capacity (think pharmaceutical supplies).

Logistics modernization is also about improving the visibility we have on our battlefield resources. With the

introduction of Global Combat Support System-Marine Corps (GCSS-MC) the warfighter will be able to place a request for services and then check on the status of that request at any time to find out when and how it is going to be delivered. Having such asset visibility will eliminate the need to place multiple orders for the same service or repair part because of lack of feedback and a complete lack of confidence in the system.

Finally, logistics modernization is also about changing our logistics processes to improve warfighter effectiveness on the battlefield. A good example is the initiative to realign supply functions. This initiative consolidates some aspects of supply management and distribution at the retail level. Doing so will eliminate the need for the warfighting units to assume responsibility for managing supply support for themselves. Logistics modernization will focus supply support on what the MAGTF has access to and can quickly deliver to meet warfighters' needs, and not on what the warfighting unit has on hand at any point in time.

Based on these three examples and many others, we decided to take a stab at articulating what we believed logistics modernization was really about in terms the warfighter could relate to. Logistics modernization is really about improving MAGTF effectiveness by modernizing Marine Corps logistics processes and systems in order to improve the way critical battlefield resources are maintained, managed, and delivered to the warfighter. Doing so will result in more accurate and timely visibility of MAGTF resources, the ability to realign logistics capabilities in accordance with MAGTF commanders' priorities, and increased MAGTF combat power.

Why Is Logistics Modernization So Important?

We would be surprised if most Marines reading this article didn't agree that logistics modernization, as described above, is a good thing for the Marine Corps, but what's the imperative for change? We became convinced that there is a clear and compelling case to be made for implementing logistics modernization right now. There are two driving factors—the unresolved logistics challenges of the past and the nature of how we plan to operate in the future.

Unresolved logistics challenges. We examined lessons learned from OIF to see how the implementation of logistics modernization might have resolved some of the logistics challenges that reappeared in that conflict. We analyzed available lessons learned and reconstruction reports and interviewed many Marines from both I Marine Expeditionary Force (I MEF) and II MEF who had participated in OIF in order to support our assessment.

OIF was the largest deployment of Marine Corps forces since Operation DESERT STORM (ODS) and involved some of the most rapid advances over the longest distances ever undertaken by Marine Corps forces. This combination of factors severely stressed the logistics system (sometimes to the point of breaking) and highlighted the systemic problems of Marine Corps logistics.

We concluded that the Marine Corps' systemic logistics problems reduce the combat effectiveness of the MAGTF. These problems were the same ones we experienced in ODS over a decade ago. Some examples include the lack of information technology (IT) for effective command and control (C^2) of logistics operations, a lack of visibility of critical resources on the battlefield, insufficient line haul, ineffective processes for distribution capacity management, and the continuing requirement for "iron mountains." The Corps' failure to address these challenges argues for implementation of the new and innovative logistics processes and systems embodied in the logistics modernization initiative.

Future operating concepts. The Marine Corps has devoted a great amount of time and effort into thinking about how we will operate in the future. For example, *Naval Power 21* contains the vision for how to transform the Navy and Marine Corps into a joint warfighting force. The supporting document, *Marine Corps Strategy 21*, describes the Marine Corps' vision for supporting future combat capabilities. *Sea Power 21* is the overarching operational concept that articulates the various components required for the current force to transform into a seabased organization. *Enhanced Networked Sea Basing* describes how the seabase will be used in supporting a wide range of military operations. And finally, *Expeditionary Maneuver Warfare (EMW)* is the Marine Corps' capstone concept that identifies the supporting operational concepts as operational maneuver from the sea, maritime prepositioning force 2010, and

Characteristics of future operating concepts	Related logistics characteristics enabled by logistics modernization
Shared information environment. Speed, overwhelming tempo. Precision and lethality. Rapidly employable and deployable. Seabased operations. Persistence. Strategic and tactical agility and flexibility. Distributed, demassed forces. Decentralized decisionmaking. Stealth. Mobility. Increased operational reach. Adaptability. Singular, networked battlespace.	Integrated logistics C^2 systems/shared data. Integrated naval logistics capability. Automated tracking and monitoring of equipment. Integrated supply chains. Automated logistics planning and execution tools. Better visibility of distribution. Rapid distribution. Effective, secure, and timely CSS. Reduced logistics footprint ashore. Focused logistics. Reduced lift requirements in early phases of operations. Seabased maintenance capability. Indefinite, in stride sustainment. Tailored expeditionary logistics. Realtime reachback for logistics support. Independence from host-nation support. Responsive delivery systems. Strategic management of logistics assets.

Table 1. Characteristics of future operating concepts and their relationship to logistics modernization.

ship-to-objective maneuver. We conducted a comprehensive review of these documents, as well as other joint, Navy, and Marine Corps publications that address the nature of future operating concepts. We then compiled a list of characteristics of future operating concepts and derived the related logistics characteristics that are enabled by logistics modernization. Table 1 provides a summary of this work. This table clearly illustrates the strong linkages between logistics modernization and future operating concepts.

Seabased operations will reduce force protection requirements and footprint ashore, provide assured access, and enhance seaborne positioning of joint assets. In order to conduct such operations you need a seabased maintenance capability, integrated supply chains, integrated logistics C^2 systems, and a reduced logistics footprint. Logistics modernization provides each of these logistics characteristics. Future operating concepts simply can't be implemented without the process and system changes enabled by logistics modernization.

What Needs to Happen to Make Logistics Modernization a Reality?

The focus of logistics modernization has been on reengineering logistics IT, retiring legacy systems, and improving maintenance operations. There have been some successes. One example is the development of the logistics operational architecture (LogOA) that lays out future logistics processes and the desired end state that new IT will be required to support. This is a first-class product that will facilitate the rapid development of the supporting systems architecture (that provides the overlay of technology over the new processes defined by the LogOA), the procurement of new IT systems like GCSS-MC, and the implementation of the new logistics processes.

Progress has been slow in a number of critical areas. There have been considerable delays in acquiring the enabling IT to make logistics modernization a reality. Efforts to educate Marines on logistics modernization have been weak to nonexistent. Progress in developing some of the strategic partnerships necessary for implementation of logistics modernization across the Marine Corps has also been slow. But we are beginning to see signs of improvement in each of these areas. The IT (GCSS-MC) finally became a program of record and received funding as of 1 October 2003 to begin the acquisition process, with projected fielding of the first block in 2006. DC I&L has developed a new communications plan, complete with a modern web site and a new focus on education via Marine logistics chain analysis teams. Finally, the strategic partnership with Commanding General, Marine Corps Combat Development Command (MCCDC) has recently been reenergized with the transition of the LogOA to the Director, Expeditionary Force Development Center, MCCDC.

There are four key actions required to keep logistics modernization moving forward and on track. The first was to engage the Commandant of the Marine Corps (CMC) and get his active and vocal support. No single factor was more essential to the success of logistics modernization, especially given its far-reaching implications for the warfighter. Top-down leadership from CMC represents the critical forcing function for implementation of logistics modernization. ALMAR 006/04 clearly states CMC's position on logistics modernization. In it he writes:

> I fully support implementation of Logistics Modernization through the Expeditionary Force Development System (EFDS), enabled by GCSS-MC, and focused on improved tactical support to the operating forces. I ask Commanders at all levels to be engaged in this important MAGTF logistics modernization effort that is critically needed today and without which we will not be able to support EMW and Seabasing in 2015.

The second action concerns the need for the expeditious acquisition of critical IT enablers, and in particular GCSS-MC. We expressed our concerns about the Marine Corps' ability to deliver effective IT systems with advertised capabilities on time and on budget. We stressed the importance of paying attention to IT architecture demands (such as bandwidth) and hardware/system requirements (such as blue force tracker and radio frequency tags) that will ensure the effectiveness of GCSS-MC once fielded. We also highlighted the importance of developing a plan for including operator input in all phases of the acquisition process, but particularly when identifying required capabilities and when testing the capabilities and features of candidate systems.

The third key action item concerns the transfer and vetting of the LogOA through the EFDS. This is a critical phase in the process of understanding the more detailed implications of logistics modernization and its potential impact on doctrine, organization, training, materiel, leadership, personnel, and facilities. Adequate resources and attention must be devoted to this important effort as MCCDC expedites the LogOA through this process. Finally, we emphasized the importance of reenergizing logistics modernization-related communications and outreach efforts. Without fail, each of our panel discussions with the Operating Forces commands and others eventually turned to communications and the degree to which this had been a problem for the initiative. Logistics modernization had always been described in logistics and business terms instead of language that would actually mean something to the warfighter. There had been too much focus on the efficiencies to be gained and not enough on effectiveness, the warfighter's primary concern. Also, early efforts had a clear logistician vice operator focus. Early communications efforts did a poor job of distinguishing among the many ongoing logistics initiatives at the time. As a result, unrelated and unpopular initiatives, such as CSS migration, were grouped together with logistics modernization, at least in the warfighters' eyes.

There was little effort to understand and address the resistance to some aspects of logistics modernization. For example, the issue of "ownership and control" represents a significant potential stumbling block to

future acceptance of logistics modernization. Many Marines believe that assets taken away or consolidated at another level will be misapplied to less critical tasks, that the level of support previously provided by these organic assets will be reduced in a significant way, and that commanders will lose flexibility to get critical tasks accomplished in a timely fashion. For example, many of the Marines who perform maintenance tasks in combat and combat support units also contribute to other essential activities such as security-related functions. A legitimate concern is how these important functions will be accomplished with fewer resources. As a result, some Marines associate logistics modernization with reduced operational effectiveness and resist it. These perceptions are real and thus should be addressed directly as the initiative moves forward.

Summary

We believe that logistics modernization *is* moving the Marine Corps in the right direction. It complements and enables all characteristics of future operations concepts, and it has great potential to address many of the systemic logistics challenges faced by Marine forces in OIF and past operations. We believe that logistics modernization will implement proven practices that will allow the Marine Corps to overcome current deficiencies and enable effective maintenance, management, and delivery of critical resources on the future battlefield. Logistics modernization will enhance MAGTF lethality by bringing Marine Corps logistics into the 21st century and defining the way we will provide goods and services on the battlefield. If we are to realize maneuver warfare and truly improve the effectiveness of our MAGTFs then we simply have to get into the modern logistics world. Accordingly, we join with the CMC in supporting this critical initiative to improve tactical and operational MAGTF logistics both now and in the future.

US MC

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The Courage to Change

by LtCol John Chandler, USMC(Ret)

In order for our Marines to be supported during the global war on terrorism, logistics systems and processes must change.

The dynamics of any organization is apparent in the day-to-day operations that sustain that organization. Dynamics can be observed by the ferocity with which they attack a project, a program, or a city. Dynamics is the combined energy of people, processes, and technology. This concept is easily understood by Marines whose combat organizations move forward because of people, processes (methods), and technology (weapons systems), and without an equal and complementary amount of each ingredient dynamics suffers. The lack of any of these three crucial elements will impact the organization's ability to complete its mission. It takes a commander to develop and maintain dynamics in peacetime and in combat, but it takes *courage*—by the commander—to change the elements of dynamics in order to optimize the organization, especially in combat. Is maintaining dynamics the "burden of command"?

In the late 1990s the Deputy Commandant, Installations and Logistics (DC I&L) realized that logistics support had not been keeping pace with the modernization being institutionalized by expeditionary maneuver warfare (EMW). EMW propels Marines farther and faster than the "logistics chain" would eventually be able to support. In the late 1990s it appeared that the Marine Corps had the luxury of time and space for developing new systems that would enable the logistics chain to become more flexible, responsive, and reliable, and support the dynamics of EMW. However, time waits for no man, and the enemies of our Nation did not stand still. The global war on terrorism (GWOT) now propels forces from all major Marine installations into harm's way. Each deployment and engagement continues to test 30-year-old systems and proves that our logistics chain is, under the current strain of GWOT, stretched as far as it will go. Evidence of that can be found in the experiences reported and recorded by all commanders who returned from Operations ENDURING FREEDOM and IRAQI FREEDOM (OEF/OIF). The dynamics of EMW has exceeded the dynamics of our logistics chain.

It takes courage to change, and DC I&L, LtGen Richard L. Kelly,